CANADIAN NORTH-WEST IRRIGATION COMPANY.
Irrigated lands in southern Alberta. n.d.

IRRIGATED LANDS

—IN—

SOUTHERN ALBERTA

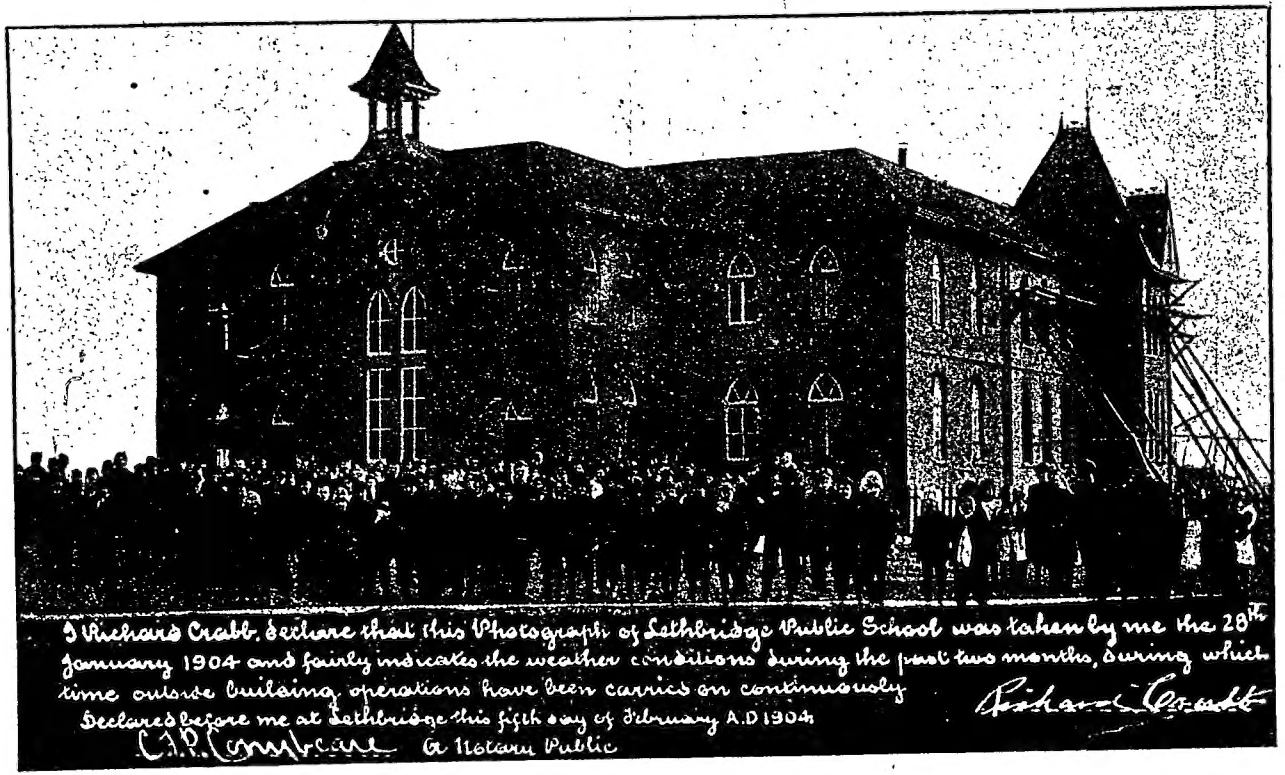
The "Colorado of Canada."

WITH NOTES ON THE CLIMATE, CROPS, MARKETS AND VALUES, RAILROAD FACILITIES, AGRICULTURAL OPPORTUNITIES, AND THE FIELD FOR EMPLOYMENT OF LABOR.

THE CANADIAN NORTH WEST IRRIGATION CO'Y,

LETHBRIDGE, ALBERTA.

THE STOVEL CO., Printers and Lithographers, Winnipeg.



Public School, Lethbridge.

Irrigation.

The Canadian North-West Irrigation Company, whose irrigation canal system is one of the finest in America, and consists at present of nearly 150 miles of main waterways, is now offering choice locations under its ditches in the Lethbridge district of Alberta.

To the normal advantages of farming on new virgin soil, there are added many features of profit by a system of irrigation.

While the artificial application of water to growing crops increases the original cost of farming and adds to the labor of the farmer, it **assures certainty of crops, and the quantity and quality of the product far more than compensate for the added cost of labor.**

Irrigation provides a continual fertilizing agent without added expense. The alluvial deposits carried in suspension in the waters of the rivers in spring and early summer are deposited on the soil and constantly enrich and fertilize it, so that a process of renewal is constantly in operation. This accounts for the fact that in countries where irrigation has been practised for long periods, wheat crop after wheat crop has been taken from the same soil with no material reduction in the yield, and, consequently, no evidence of the exhaustion of the soil. The most striking demonstration of this fact is the Nile Valley in Egypt, where cultivation has been continued for centuries, the lands finding elements of renewing strength in the properties of the muddy waters of that great river.

Irrigation, where the source of supply, as in this instance, is a never-failing stream like the St. Mary's River, gives certainty of crop, **protects against drouth,** and places the farmer in the position of regulating the rainfall. There is no agricultural region, even in districts of normal rainfall, where irrigation would not be occasionally beneficial, for, even in such countries, drouth is not unknown. In the most favored agricultural districts of Manitoba and the older provinces, every experienced farmer knows that there are seasons when the rainfall is sufficient and is distributed at such proper times as to keep the crop growing steadily, with no set-backs, resulting in a magnificent yield; he also knows, to his misfortune, that there are other seasons with too much or too little rain, or rain distributed at times when least required, producing light and damaged crops. At such seasons, a few of which means ruin, he naturally longs for the benefits of irrigation.

In the irrigated sections of Southern Alberta good crops are practically assured annually, because

the farmer can apply the water to his land as circumstances demand.

And, in the sense of regulating the elements, **irrigation assures a larger yield, and, in nearly all crops, a better quality than would otherwise be obtained.**

Irrigation is **"crop insurance,"** and the farmer who has become accustomed to the cultivation of irrigated land will never be content to return to ordinary farming conditions. He would regard that as a change from certainty to uncertainty in crop production.

The quality and flavor of such fruits as raspberries, strawberries and currants, and of all vegetables raised by irrigation are very superior.

The farmer not familiar with irrigation would be **surprised at the simplicity of its application.** The method usually employed in Western America, wherever irrigation is practised, is known as the "flooding system." The water is brought from the main canal to the highest point of the farm or land to be irrigated by a lateral ditch, from the end of which is carried over the various fields in small distributing laterals. The last mentioned laterals are simply cut by a plow, or hoe, or spade, and the water is allowed to flow out of them and spread over the surface as far as it will go, and sink as deep as may be necessary to give the required moisture to the roots of the growing grain.

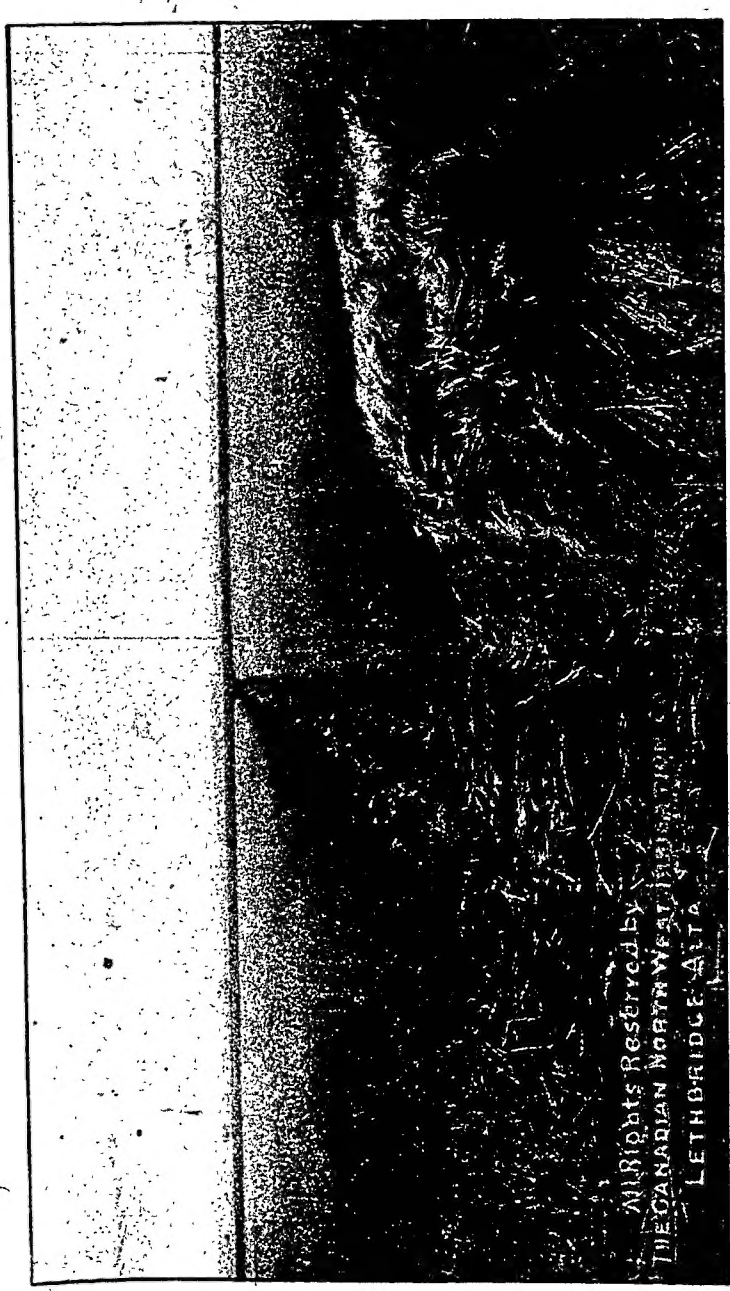
The simplicity and effectiveness of this system is immediately apparent, and it will be readily seen that one man can look after the distribution of water over quite a large area.

The main canal is, naturally, of sufficient capacity for the needs of the whole area to be irrigated by the canal system, the main lateral leading from it large enough for the special district it is intended to serve, and the distributing ditches made, so that they can spread the water quickly over the ground to be irrigated. When the field, or any portion of it, is sufficiently watered, the cuts through which the water escapes from the ditches to the growing grain are closed by a shovelful of earth, and the water carried to another portion of the field, and that operation is repeated until the whole crop is irrigated, when, if thought desirable, the distributing ditches are levelled in with a plow. This is often necessary for the easier operation of the binder.

The construction of ditches by the farmer is quite simple. It must be remembered that the water requires to be near the surface, so that depth in ditches is not desirable, and

consequently a plow run over the same furrow two or three times at the most is usually all that is required.

The "furrow method" is also employed, though most



Field of Oats, Lethbridge, (shewing irrigating ditch ploughed in ready for binder).

frequently for root crops, as corn, potatoes or other vegetables, as well as in orchards, vineyards, and in small fruit gardens. The water is allowed to follow down the furrow

made by the "shovel-plow" between the rows of vegetables, and seeping downwards and sideways, rapidly reaches the roots to be benefitted.

Climate.

The climatic conditions are most favorable, the district being marked by an equable temperature, with freedom from rapid and extreme fluctuations in the growing season, and on account of the great amount of sunshine is known as **"Sunny Southern Alberta"** The predominant feature is the great dryness and clearness. The absence of rainfall in the summer months accounts for the application of irrigation to agriculture, and **a certainty of crops is assured** by reliance on the steady, uniform and abundant supply of water in the St. Mary's River.

With the exception of that portion of British Columbia situated along the Pacific Coast, **Southern Alberta enjoys the mildest climate in Canada.** What might be termed "Winter" rarely sets in before the end of December, lasting about six weeks, during which period the snow, seldom exceeding a depth of four inches, often disappears two or three times, owing to the warm "Chinook" winds from the Pacific Coast which are prevalent in Southern Alberta. As a consequence wagons are used during the entire year, and it is only very rarely that sleighs are to be seen in the district. In January and the early part of Feburary the district is sometimes visited with short periods of sharp cold weather.

Soil.

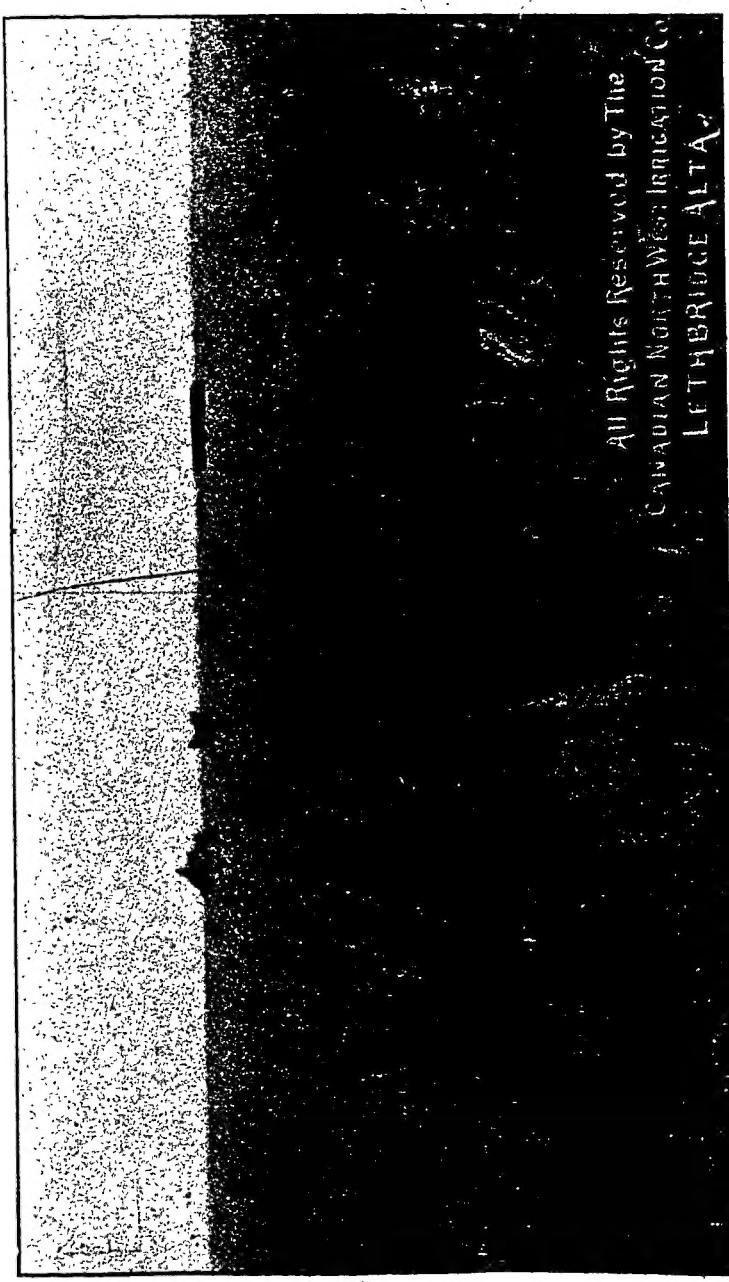
The soil of the plains is generally rich and deep, and varies from a rich sandy to a clay loam. All of it is thoroughly adapted to the growth of all classes of cereals, cultivated grasses and vegetables in great abundance.

Farming Season.

The farming season in Southern Alberta may be reckoned as opening in March, though it is no unusual occurrence for plowing to be prosecuted in February. It will undoubtedly be found better to plow in the fall, so that the land may obtain the benefit of the winter moisture. Winter wheat has proven a successful crop, though spring wheat is at present very largely grown.

Small fruits do exceedingly well in this district and a

great number of apple, plum and pear trees have been planted with every prospect of future success. The constantly increasing demands of the growing towns in the



Field of Oats on Messrs. Fairfield's Farm, Lethbridge-(91 bushels to the acre).

mining regions adjacent to this district will have a tendency to stimulate production of all classes of fruits and vegetables.

Sugar Beets.

As evidence of the great future in store for this district it may be mentioned that the soil having been found to be admirably suited to growing beets, a sugar factory was

Irrigating Sugar Beets.

erected at Raymond (19 miles from Lethbridge) in 1903 at a cost of over $500,000. Beet raising, as is well known, is very profitable, and the erection of such a factory, afford-

ing as it does to the farmer a ready market for his product, cannot fail to be of immense benefit to the whole of the Lethbridge district.

Stock Raising.

Southern Alberta is looked upon as possessing the finest range for stock raising in America. The grasses are most nutritious, and cure on the stem, upon which cattle feed through the entire winter. At least 200,000 head of horned stock and large bands of horses are running at large both summer and winter, never having been under shelter of any kind.

Though the breeding of cattle is very profitable, still a new field for development can be opened up by the production of cultivated hay. The rancher will then be enabled to care for young and weak stock during periods of cold weather, and the spring markets, which always pay higher prices, can be supplied with steers at least three months earlier than good fat range stock can be taken from the new grass.

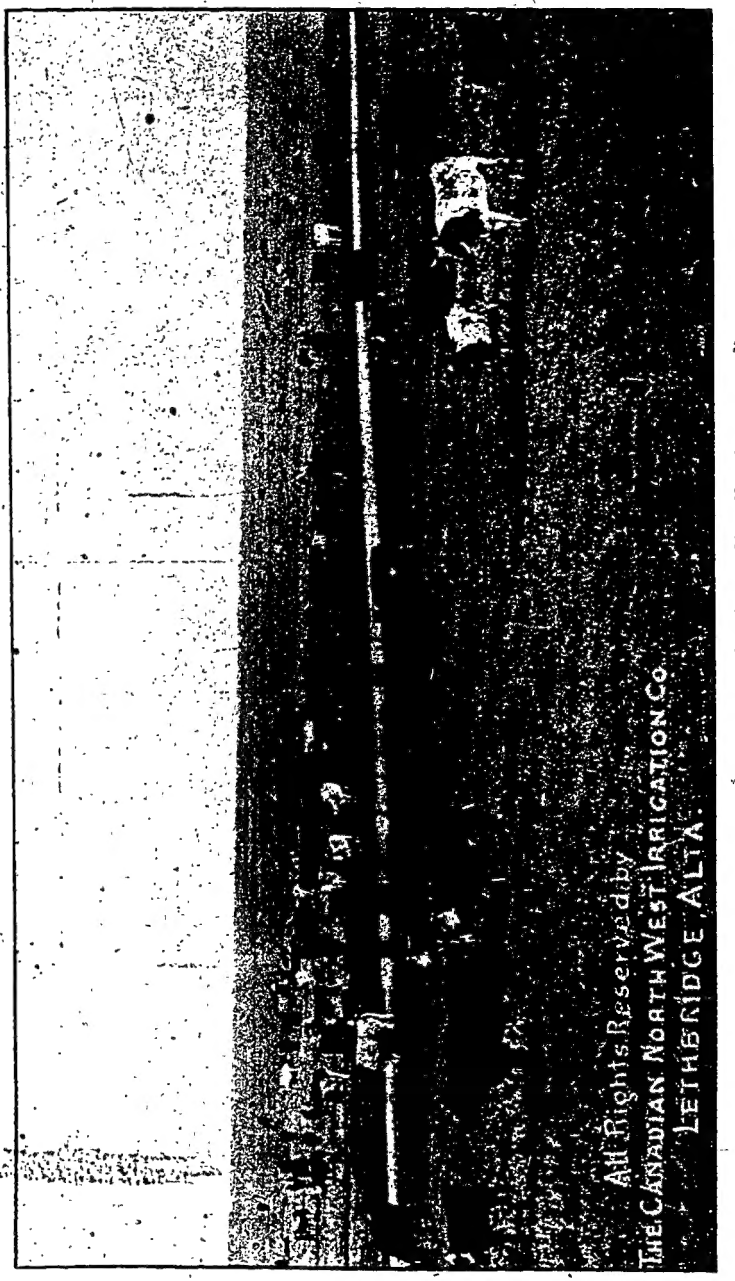
The cultivation of lucerne, timothy, Italian rye, red clover, and western blue joint grass has met with unqualified success in the district and will undoubtedly prove an important factor in its future agricultural development.

Markets.

Since the completion of the Crow's Nest Pass branch of the Canadian Pacific Railway, Lethbridge has become practically the "Gateway" town and distributing point to the important and rapidly developing mountain mining regions of East and West Kootenay in British Columbia, some of the towns being Fernie, Frank, Blairmore, Coleman, Cranbrook, Fort Steele, Ainsworth, Slocan City, New Denver, Sandon, Kaslo, Trail, Nelson and Rossland, and an idea of the rapidity of the development of the mining interests of those districts may be gathered from the fact that Rossland, a town of about eight years' existence, has a population of about 10,000.

These regions are forced to derive their principal supply of agricultural produce from the State of Washington, lying immediately to the south, notwithstanding the high tariff duties (referred to below) levied against farm products coming into Canada. The irrigated lands in the neighborhood of Lethbridge are the nearest and most favorably situated for supplying the constantly increasing demand of the mining districts named, and in addition to the protection offered by a high tariff, the freight rates on

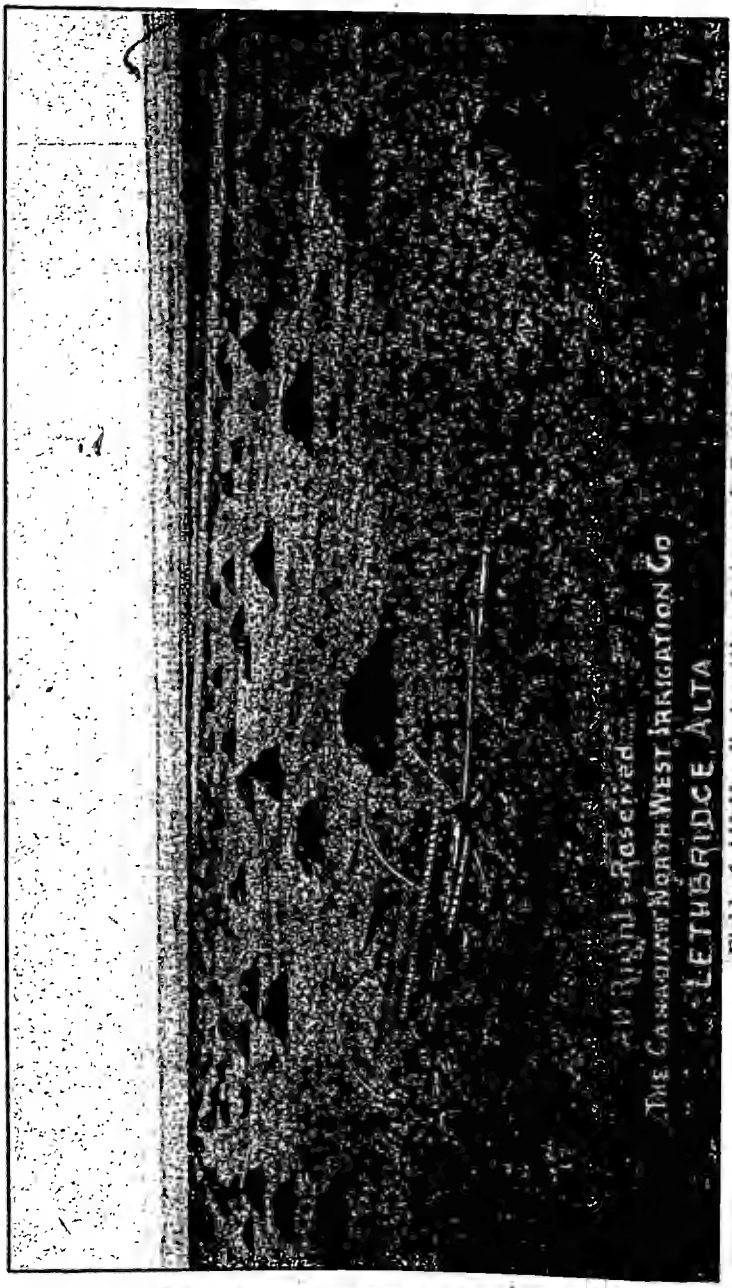
the Crow's Nest Pass branch are very low, thereby assuring the markets of South-Eastern British Columbia to the farmers of Southern Alberta.



Cattle near Lethbridge (showing distributing canal).

The local market is also important. Lethbridge, with a population of 3,000, imports largely in eggs, butter, flour, feed, pork, etc. Over $10,000 in each year is paid for

freight alone, shipped mostly from the United States. The freight on flour shipped into Lethbridge from Manitoba, which, until recently, supplied the entire consumption of Southern Alberta, runs from $135 to $140 per carload. The importation of eggs amounts to about 120 cases



Field of Alfalfa, first cutting from seed, Lethbridge.

Note.—Only a limited acreage has so far been sown with alfalfa, but the results of the two cuttings in 1903 have demonstrated that our irrigated lands are admirably adapted to the growth of this valuable fodder.

monthly, while about 1,000 tons of native (wild) hay is consumed annually, at prices ranging from $10 to $14 per ton. There is practically an unlimited export market for cultivated hay.

These few items will clearly demonstrate that a large and ready market is open for all the products raised on irrigated lands in Southern Alberta.

Duties on American Products.

Hay	$2 per ton
Wheat	12c. per bushel
Potatoes	15c. per bushel
Eggs	3c. per dozen
Flour	60c. per barrel
Cheese	3c. per lb.
Fresh Meats	3c. per lb.
Mutton and Lamb	35 per cent.
Buckwheat Meal and Flour	¼c. per lb.
Beans	15c. per bushel
Oats	10c. per bushel
Barley	30 per cent on market value.
Apples	40c. per barrel
Cabbage	25 per cent.
Grain	20 per cent.
Butter	4c. per lb.
Pork	2c. per lb.
Poultry and Game	20 per cent.
Oatmeal	20 per cent.
Cornmeal	25c. per barrel
Bran	20 per cent.

Transportation Facilities.

The irrigated lands of this Company are exceptionally well situated for transportation facilities.

The Canadian Pacific Railway enters Lethbridge from the east, with all-rail communication from Quebec, Montreal, Toronto, Winnipeg, etc. The Crow's Nest Pass branch enters the town from the west, placing the town in direct communication with the great Kootenay mining districts to the west, and with Calgary, Edmonton, and other northern points. The Alberta Railway & Coal Company's line enters from the south, giving direct communication with the United States through Montana.

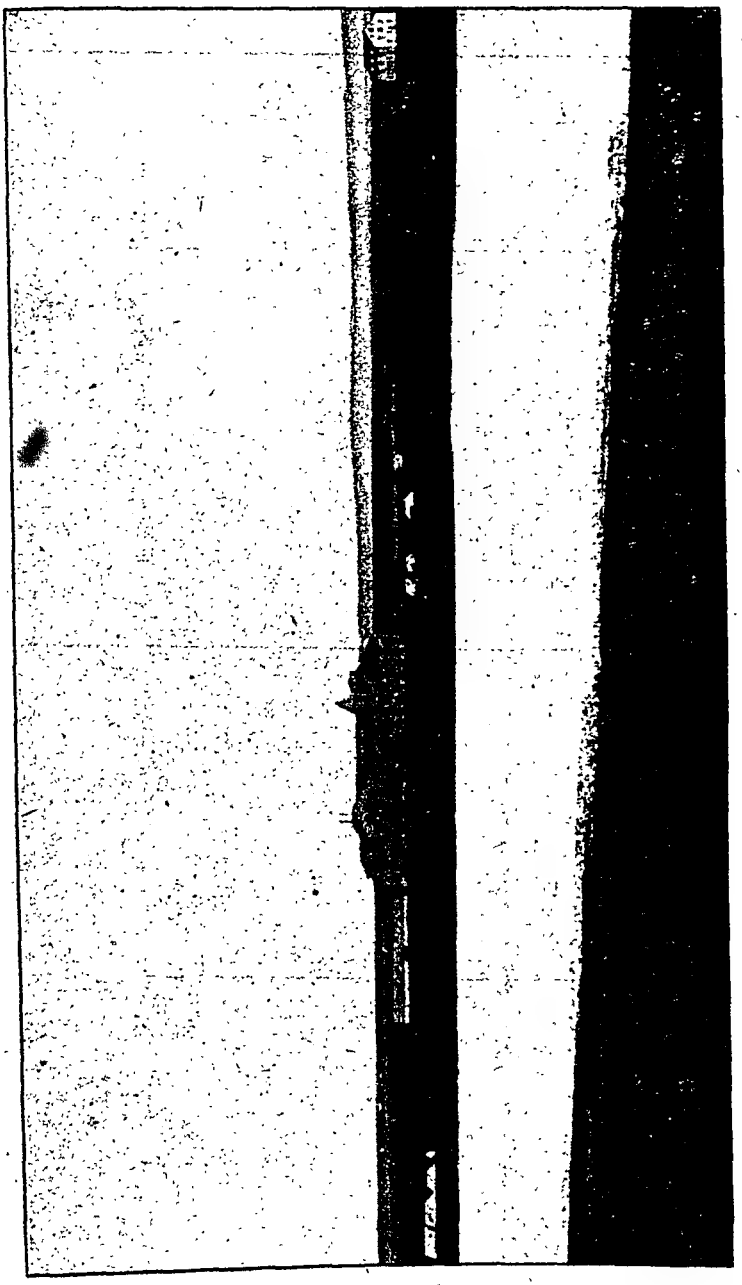
The geographical siuation is most advantageous, and will speedily prove of the greatest assistance to the agriculturist engaged in farming on the Lethbridge plains.

Price of Lands.

The Company sells lands capable of irrigation at $12 per acre and upwards, on easy terms of payment, viz.: In ten equal annual instalments, with interest at the rate of 6 per cent. per annum, to be paid with each instalment, on the principal amount outstanding. Purchasers who wish to save the interest are allowed to pay in full and obtain title at any time before the expiration of the purchase period. The Company also sells land above the Canal at $6 per acre, the terms of payment being the same.

In addition to the purchase price of land, the owner or occupier, if he requires water, will be required to pay an annual rental in accordance with the terms of the Company's water agreement.

As an acre of irrigated land **usually produces 50 per cent. more than an acre depending entirely on rainfall,** the annual charge for water may well be



Sugar Factory, showing reservoir, Raymond (south of Lethbridge).

termed **"crop insurance,"** and is a profitable investment for the farmer and necessary to the Irrigation Company for the proper care and maintenance of the canal system.

In the irrigated portions of the United States, unimproved lands sell at from $15.00 to $50.00 per acre, upon which the annual water rate varies from $1.00 to $2.50 per acre.

Explanation of Water Agreement.

The method of selling water is by the cubic foot or fraction thereof passing a given point in each second of time. For instance, a box pipe or conduit, one foot deep and one foot wide, filled with water and flowing at an average rate of one foot in a second of time, would represent what is known as "one cubic foot per second," sometimes called a "second foot." Water is measured as it flows over a simple device, known as a weir.

One cubic foot of water per second is regarded as a liberal allowance for the irrigation of 150 acres of land in this district. The Company has fixed upon an annual rental of $150 for each cubic foot of water per second, to be supplied to lands purchased from it. This is the reason that water is sometimes spoken of as costing $1 per acre each year.

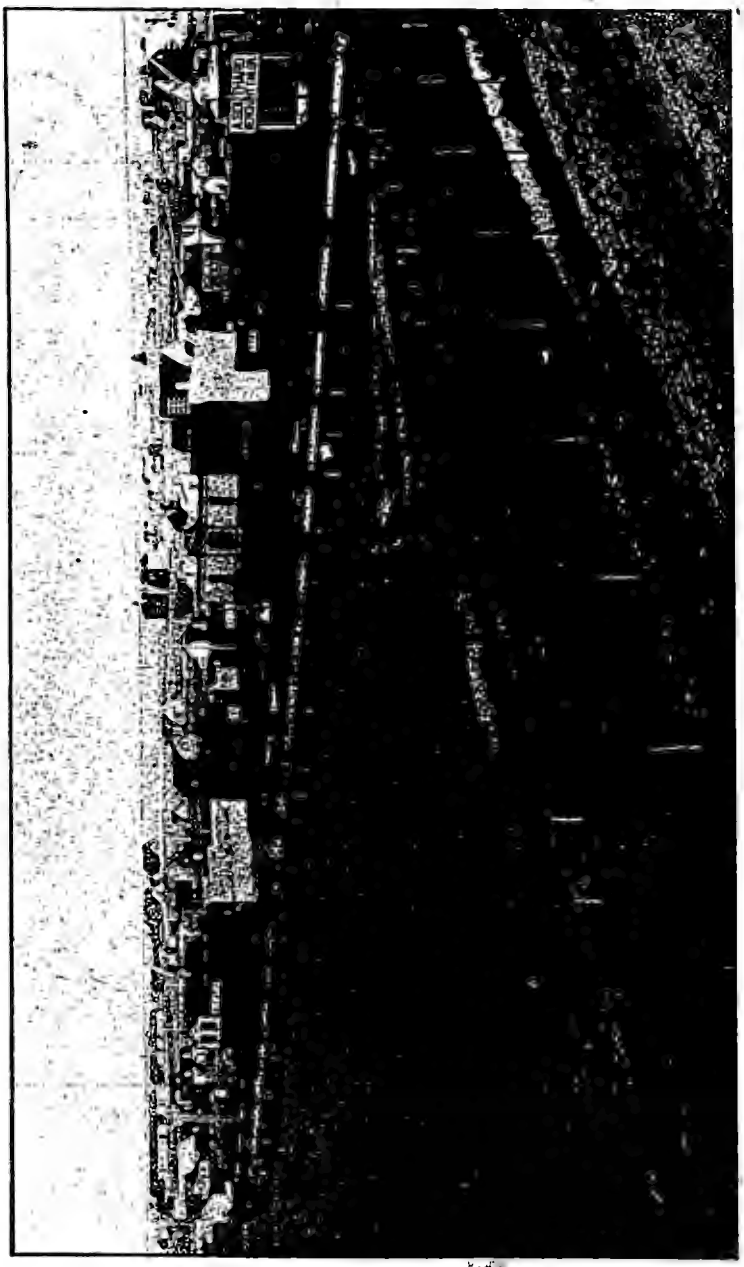
It does not, however, follow that the settler always wishes to irrigate the full area purchased; in some parcels water will not always reach every portion, on account of unevenness of the surface.

The purchaser of land has therefore to decide as to the area he intends cultivating, under irrigation, and when making the purchase he is called upon to state the amount of water required. For instance, 160 acres may be purchased, and yet the purchaser may only elect to take half a cubic foot of water per second, for which the charge will be $75 each year.

A water agreement accordingly issues on the same date as the land is purchased. This water agreement provides for the payment of the rental on the 1st May in each year, or such later date as the Company may decide; and it is also provided that the water is to be applied to the land purchased, and no other land. These are the main features of the water agreement, and the continued yearly payment of the rental secures the settler for all time to come in the amount of water contracted for, while failure to pay the rental for any two years in succession annuls the agreement and the Company may sell to other applicants the water covered by it.

Schools.

The North-West is provided with a school system as efficient as the older provinces of Canada, and gives educational facilities equal to those of the most thickly settted portions



View of Lethbridge, Alberta.
(Shewing corner of public square, with trees and irrigating ditch).

of the East. Four heads of families may form a School District, and the Government grants have been running from 65 to 75 per cent. of the teacher's salary, leaving but a small amount to be raised by the settlers themselves.

Taxes.

The North-West Government has withdrawn the Municipal system, with its costly machinery, from farming communities and replaced it by a very simple and inexpensive law known as "Local Improvement Ordinance," by which districts are organized containing not more than two townships, with an overseer duly elected by the people, who are taxed $2.50 for each 160 acres owned or occupied. The tax may be commuted by two days' labor on road or other district improvements. This, together with the school tax referred to elsewhere, are ALL the taxes imposed on farming districts in the North-West, which may truly be said to be freer from taxes than any other portion of America.

Settlers' Effects, Duty Free.

The household goods and other effects of settlers coming into Canada are free of duty. Item No. 455, Schedule B, of the Canadian Customs Tariff provides for the free entry of the following:

"Wearing apparel, household furniture, books, imple-"ments and tools of trade, occupation or employment, guns, "musical instruments, domestic sewing machines, type-"writers, live stock, bicycles, carts and other vehicles and "agricultural implements in use by the settler for at least "six months before his removal to Canada, not to include "machinery, or articles imported for use in any manufac-"turing establishment, or for sale, provided that any duti-"able article entered as settlers' effects may not be so en-"tered unless brought with the settler on his first arrival, "and shall not be sold or otherwise disposed of without "payment of duty, until after twelve months' actual use in "Canada."

The Regulations under the above section provide as follows: Upon the arrival of the settler into Canada, free entry will be allowed on 16 head of stock, together with their offspring, if under six months old, and thereafter, upon presentation to the Customs Department of satisfactory evidence of his having purchased, within a reasonable time after his arrival, land to the amount of 160 acres, a refund will be allowed to the extent of the duty paid on an additional 16 head of stock with their offspring under six months old.

On any additional number of live stock which the settler might bring with him into Canada he will be required to pay an *advalorem* duty of 20 per cent. based on a fair valuation of the stock at the point of shipment.

Settlers' stock, when accompanied by a certificate of health, will be admitted without detention; but when not so accompanied, they must be inspected at the International Boundary, and, if found to be affected with a contagious disease, must be returned to the United States or killed without indemnity.

It will appear from the above item that the settler can only make one free entry, and in the past that free entry had to be made upon his arrival in the country, and covered those articles which he had with him subject to free entry. A recent ruling, however, would indicate that some latitude is now allowed to Customs Officials in the interpretation of a "free entry," whereby settlers who have been unable to bring stock on the same train with their moveables will be allowed to return and bring in and pass free such numbers as are entitled to free entry.

General Information.

The following items of information may be of service to the prospective settler:

A good house of two rooms and small kitchen, shingle roof, with doors and windows, can be put up for $200, and upwards. A good three-roomed house, including all material and labor, can be built for from $400 to $500. This would represent a main building 16x24 feet, with 9-ft. wall, partitioned into two rooms, with a lean-to kitchen 10x16 feet. The walls of the main building would be sided and papered on the outside, and ceiled on the inside.

Good-surfaced common lumber costs $20 per thousand feet. Best cedar shingles cost $3.25 per thousand. Scantling $20 per thousand feet. Nails, per lb. by the keg, 4c. A good team of horses $175 to $200. A 3-inch Canadian wagon, from $90 upwards. A set of double harness costs $20 to $35. Plows cost from $24. Harrows, $15. Shovels and spades, 90c. each. Mowing machines cost $53. Binders, $145, and horse rakes, $30 each. All these prices are net cost at Lethbridge.

"Galt coal," from the Lethbridge collieries, is universally known throughout Manitoba and the North-West as an excellent domestic and steam-producing bituminous coal. The best grade of this fuel can be had at mines for $2.75 per ton.

The Alberta Railway & Coal Company now employ about 800 men, principally in connection with the operation of their mines at Lethbridge, and, as this Company works in harmony with the Canadian North-West Irriga-

tion Company, opportunity is presented for employment to early settlers in the mines and on the railroad at such periods of the year when farming operations are at a standstill. It is also the policy of the Irrigation Company to endeavor to use the settlers for all work of repairs or extension of the canal system.

An immigration building is available in Lethbridge, and others will be established as settlement demands.

Lethbridge.

Lethbridge is one of the leading towns in the Canadian North-West. It possesses a water supply and sewerage system and has several churches, lodges of nearly every fraternal society, good public schools, branches of the Bank of Montreal and Union Bank of Canada, well appointed hotels, iron foundry, brickyards, steam brewery, electric lighting plant, telephone exchange, and a well appointed hospital, conducted by an efficient staff.

Vegetables grown in the Lethbridge District are "Second to None."

Lethbridge is the only town in Canada with a system of irrigation ditches through its streets. Shade trees have been planted along these ditches, which, before many years, will make Lethbridge one of the most attractive towns in Canada.

Owing to its excellent railway facilities and cheap fuel, Lethbridge offers exceptional opportunities for the location and development of other industries.

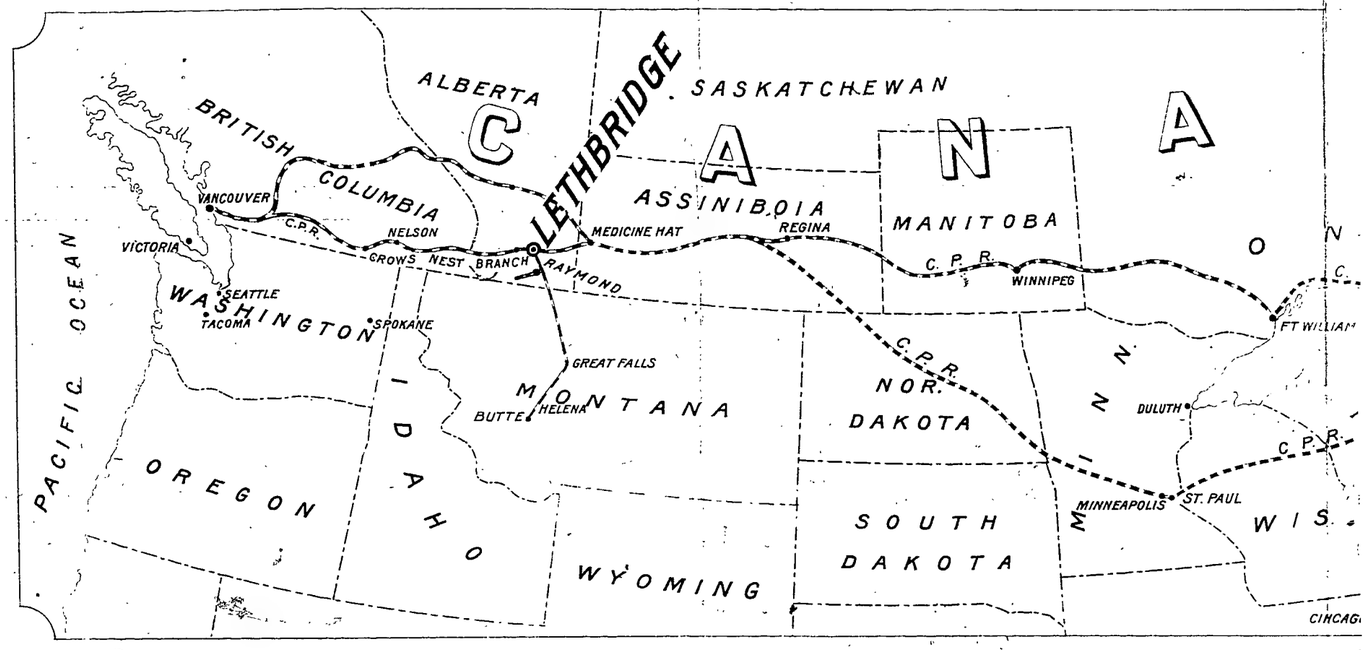
For further information address—

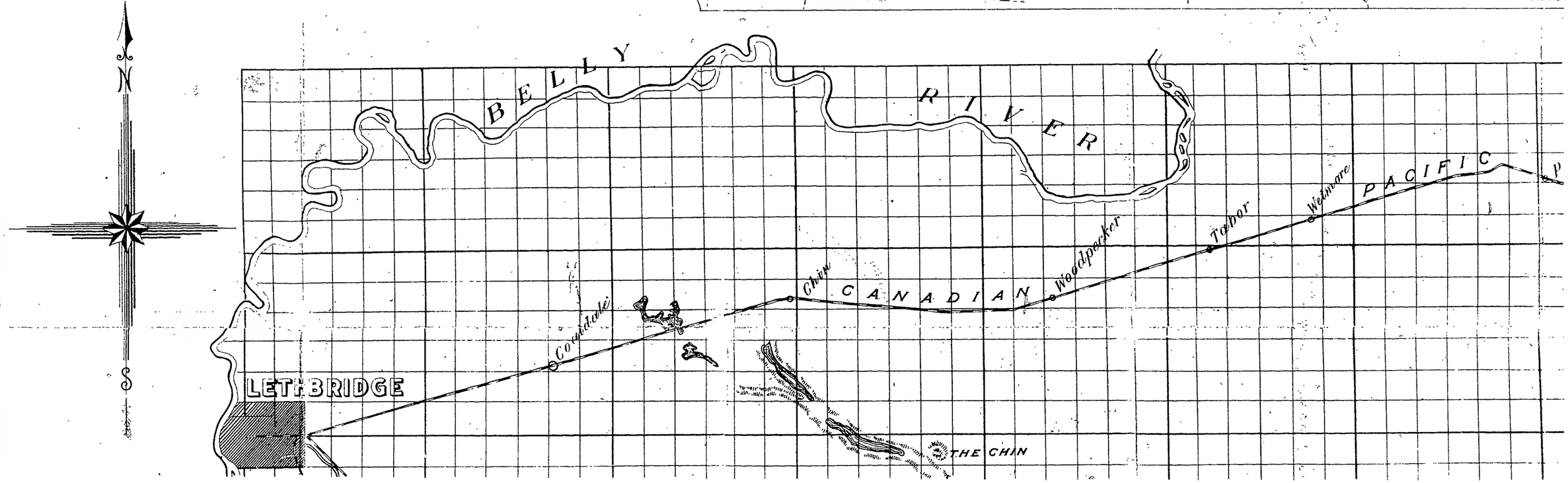
The Canadian North-West Immigration Co.,
Lethbridge, Alberta.

1 of

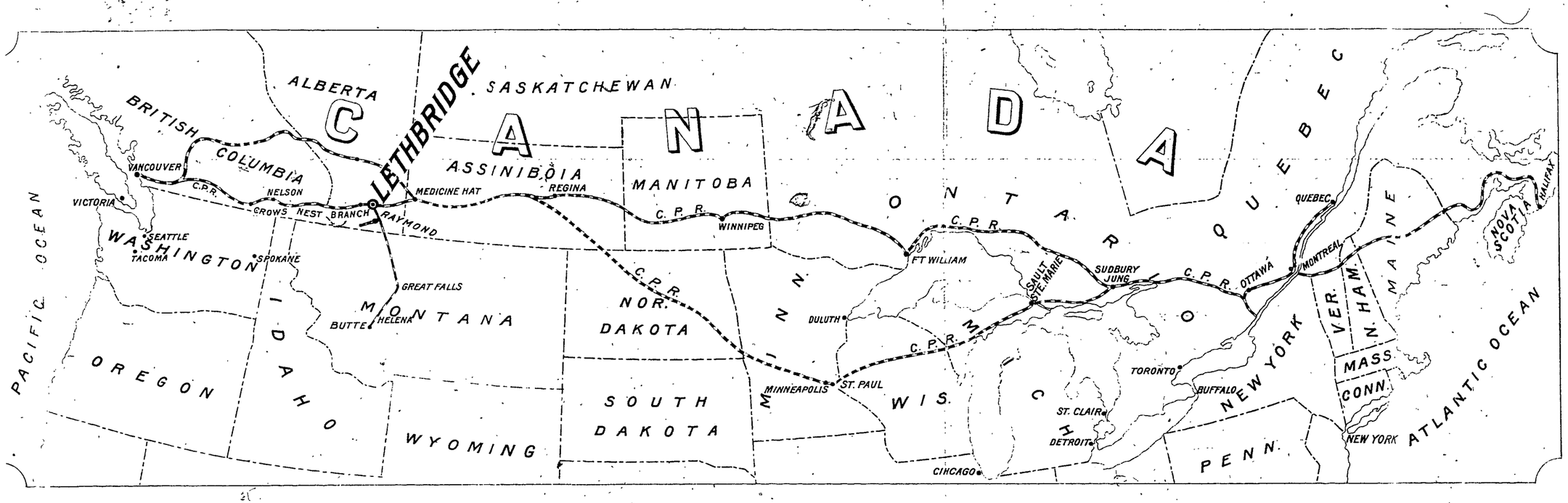
THE CANADIAN NORTH WEST
Irrigation Company

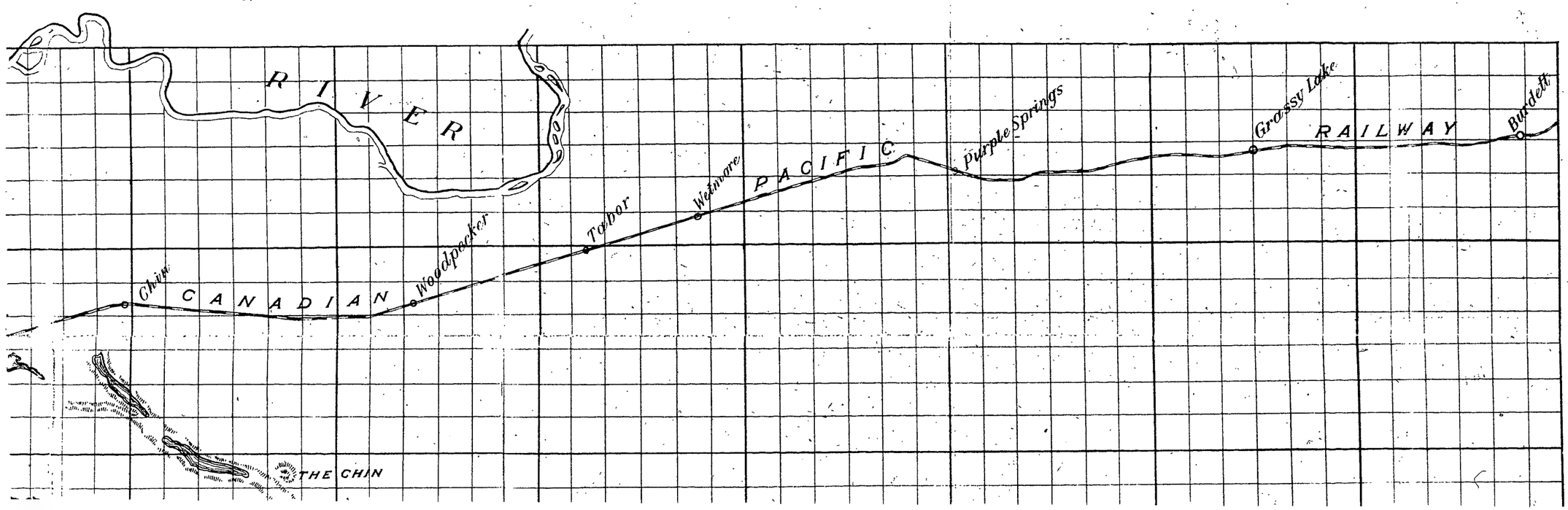
Scale 3 Miles to 1 Inch.





2 of


CANADA
ALBERTA
SASKATCHEWAN
BRITISH COLUMBIA
MANITOBA
ONTARIO
QUEBEC
LETHBRIDGE
VANCOUVER
VICTORIA
NELSON
C.P.R.
CROWS NEST BRANCH
MEDICINE HAT
REGINA
RAYMOND
WINNIPEG
FT WILLIAM
SAULT STE. MARIE
SUDBURY JUNG
OTTAWA
MONTREAL
QUEBEC
HALIFAX
NOVA SCOTIA
SEATTLE
TACOMA
SPOKANE
WASHINGTON
GREAT FALLS
BUTTE
HELENA
MONTANA
DULUTH
NOR. DAKOTA
MINNEAPOLIS
ST. PAUL
WIS.
MICH.
TORONTO
BUFFALO
NEW YORK
ST. CLAIR
DETROIT
CHICAGO
PENN.
VER.
N. HAM.
MAINE
MASS
CONN.
NEW YORK
ATLANTIC OCEAN
PACIFIC OCEAN
OREGON
IDAHO
WYOMING
SOUTH DAKOTA


RIVER
Grassy Lake
RAILWAY
Burdett
Purple Springs
Wetmore
PACIFIC
Tabor
Woodpecker
CANADIAN
Chin
THE CHIN
T.10
T.9

3 of 1

LETHBRIDGE

Coal

THE CHIN

CANAL

CANAL

C.P.R.

Crow's Nest Branch

ALBERTA RAILWAY

CHIN

ST MARY RIVER

CANAL

CANAL

Stirling

RAILWAY

ETZIKOM

RIVER

Raymond

CANAL

AND

COULEE

St. Mary's

Magrath

COAL

CANAL

CANAL

(under construction)

VERDIGRIS

Brunton

R. 9

T. 8

T. 7

T. 6

T. 5

T. 4

THE CHIN

CHIN COULEE

ETZIKOM COULEE

VERDIGRIS COULEE

Sterling

CANADA COAL CO'S CANAL (under construction)

Brunton

5 of 1

CANAL

(under construction)

C A N A L

C O U L

V E R D I G R I S

Brunton

RIDGE

R I V E R

RAILWAY

CANAL

N.W.M.P.

Milk River

M I L K

M I L K

North Branch

South Branch

Goutts

R.22 21 20 19 18 17 16 15

THE STOVEL CO. LTD. WINNIPEG.

T. 5

T. 4

T. 3

T. 2

T. 1

6 of 6

C A N A L
(under construction)

C. O. S. I.

Brunton

V E R D I G R I S

C O U L E E

R A I L W A Y

C A N A L

D G E

N.W.M.P. C A N A L

Milk River

M I L K R I V E R.

Writing on Stone
N.W.M.P.

Br an ch

Goutts

19 18 17 16 15 14 13 12

THE STOVEL CO. LTD. WINNIPEG.